II. Remarks

Claims 1-13 were pending in this application. Claims 9-13 have been allowed, and claims 1-8 have been rejected. The present amendment amends claim 1 to more particularly point out and clarify Applicants' invention. No new matter has been added by the present amendment. After this amendment, claims 1-13 will be pending.

Reconsideration of the application in view of the above amendments and following remarks is respectfully requested.

Rejection(s) under 35 U.S.C. § 103

Claims 1-3 and 7-8 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 6,059,312 issued to Staub et al. ("Staub") in view of U.S. Patent 7,264,269 issued to Gu ("Gu"). In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejection of claims 1-3 and 7-8 are traversed.

Claim 1 has been amended to recite that the airbag and closing element are located within the motor vehicle such that in the side-on collision, the closing element is not engaged by the small occupant contacting the airbag and is engaged by the larger occupant contacting the airbag. When the closing element is not engaged, gas flow through the outflow opening is enabled to reduce gas pressure in the chamber. When the closing element is engaged, the gas flow through the outflow opening is restricted. Support for this amendment may be found in Applicants' application at paragraphs [0036]-[0037] and [0039].

Staub discloses a front airbag for the reliable protection of a vehicle occupant with a reduced risk of injury to the occupant when the occupant's head is "out of position". *Staub* at Abstract. The airbag comprises an upper fabric ply 2, a lower fabric ply 4, and a middle fabric ply 6. The middle ply 6 divides the airbag, enclosed by the upper fabric ply 2 and the lower fabric ply 4, into two chambers 18, 20. The first chamber 18 is formed between the middle ply and the upper fabric ply and faces the vehicle interior or a vehicle occupant. The second chamber 20 is formed between the middle ply and the lower fabric ply, and is connected to the first chamber 18 via an overflow port 16 (Examiner suggests the overflow port 16 is most analogous to Applicants' claimed outflow opening at Office Action page 2).

When the airbag is being inflated, the inflator 12 provides gas that flows into the second chamber 20 of the airbag along a path mainly transversely to the direction toward the vehicle occupant (i.e. transversely to the direction of principal deployment of the airbag). This causes the airbag to be inflated as quickly as possible radially, in order to cover a large area before it moves toward the vehicle occupant in the direction of principal deployment. Increased safety is thereby achieved if the vehicle occupant is not centered in front of the airbag. The gas then flows out of the second chamber 20 through the overflow port 16 into the first chamber 18 of the airbag to fill this chamber. In this case as shown in Figure 1, the vehicle occupant is positioned far enough away from the airbag module that the airbag can deploy completely ("properly positioned" scenario) *Id.* at Col. 3, line 44 through Col. 4, line 19.

In a modified embodiment, a diffuser formed of a fabric portion 28 (Examiner suggests portion 28 is most analogous to Applicants' claimed closing element 28 at

Office Action page 2) is arranged in the first chamber 18 over the overflow port 16. In the properly positioned scenario, the portion 28 further promotes radial inflation of the airbag by causing the gas flowing out of the second chamber through the overflow port 16 to be deflected to flow essentially laterally into the first chamber 18. *Id.* at Col. 5, lines 41-59.

Notably in the above scenario for both embodiments, the occupant is properly positioned relative to the airbag by being spaced apart from the airbag in the principle direction of deployment (e.g. occupant is rearwardly spaced apart from the front airbag) to allow the airbag to fully deploy before the occupant contacts the airbag. However, the size or stature of the occupant only relate to how the occupant is centered in front of the airbag. Since the airbag is disclosed as inflating radially to cover a large area for increased safety before the airbag moves toward an off-centered occupant in the direction of principal deployment, the size or stature of the occupant will not cause the airbag to respond differently, or more specifically cause the portion 28 to be engaged or not engaged, when the occupant contacts the airbag.

Figure 2 shows a section through the airbag in which the head 24 of the vehicle occupant is too near the airbag module or the airbag ("out of position" scenario). Here too, when the inflator 12 is activated gas flows radially, essentially transversely to the direction of principal deployment, into the second chamber 20 between the middle fabric ply 6 and the lower fabric ply 4. In this scenario, the airbag inflates until the middle ply 6 presses the upper fabric ply 2 against the head of a vehicle occupant. At this point, further movement of the upper fabric ply is restrained or prevented by the head of the vehicle occupant. Since the middle ply 6 is simultaneously pressed against the upper

fabric ply, the overflow port 16 in the middle ply is likewise pressed against the upper fabric ply and is sealed off by the latter. This prevents the possibility that further gas will flow into the first chamber 18 of the airbag. *Id.* at Col. 4, lines 50-67.

In the modified embodiment illustrated in Figure 4, the middle ply 6 still presses the upper fabric ply 2 against the head of the occupant, which retrains movement of the upper ply 2. The restrained upper ply 2 causes the portion 28 to pressed against the middle ply 6 to close the overflow port 16

Notably in the out of position scenario for both embodiments, the airbag responds differently than in the properly positioned scenario only because the occupant is so close to the airbag in the principle deployment direction that the airbag can only partially inflate before contacting the occupant's head. However as in the properly positioned scenario, the size or stature of the occupant only relate to how the occupant's head is centered in front of the airbag, and since the airbag is disclosed as inflating radially to cover a large area and therefore, the head of a large or small occupant will still press the upper fabric ply 2 against the middle ply 6 and/or fabric portion 28 simultaneously to seal off the overflow port 16, the size or stature of the occupant will not cause the airbag to respond differently, or more specifically cause the portion 28 to be engaged or not engaged, when an out of position occupant contacts the airbag. Accordingly, Staub fails to disclose an airbag responding differently to different size occupants when striking the airbag including the fabric portion 28 not engaging when the small occupant contacts the airbag and engaging when the larger occupant contacts the airbag.

As noted by the Examiner, Staub also fails to disclose that the airbag is a side airbag and relies on Gu for such disclosure. However, Gu fails to disclose the elements noted as missing in Staub as discussed in the foregoing paragraphs. Rather, Gu discloses an airbag with cushion cells, which upon receiving the head of the occupant, exhibit an internal pressure higher than a predetermined value, causing gas to flow into a secondary chamber through an air-permeable panel (see *Gu* at Abstract), but fails to disclose that the airbag responds differently to different size occupants when striking the airbag. More particularly, Gu does not disclose a closing element that is not engaged when a small occupant contacts the airbag and is engaged when a larger occupant contacts the airbag. That is, whether the head of a small occupant or a large occupant strikes the airbag, the cushion cells still become pressurized causing gas to flow through the air-permeable panel.

Neither Staub nor Gu independently or in combination, disclose, teach or suggest the present invention recited in claim 1. More specifically, Neither Staub nor Gu independently or in combination, disclose, teach or suggest an airbag responding differently to a large and a small motor vehicle occupant striking the airbag in a side-on collision including the airbag and closing element located within the motor vehicle such that in the side-on collision, the closing element is not engaged by the small occupant contacting the airbag and is engaged by the larger occupant contacting the airbag. In that both Staub and Gu lack the noted elements of claim 1, the rejections based thereon should be withdrawn. Accordingly, Applicants believe that claim 1 and its dependent claims 2-3 and 7-8 are in a condition for allowance.

Claims 4-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Staub and Gu and further in view of U.S. Patent Publication 2004/0124615 to Tanase et al. ("Tanase"). In view of the amendments and remarks contained herein, Applicants respectfully submit that the rejections of claims 4-6 are traversed.

Since claims 4-6 depend from claim 1 and since Tanase fails to disclose an airbag and closing element located within the motor vehicle such that in the side-on collision, the closing element is not engaged by the small occupant contacting the airbag and is engaged by the larger occupant contacting the airbag, the combination of Staub, Gu and Tanase cannot render the claims of the present invention as obvious. The rejections under § 103(a) are therefore improper and should be withdrawn. Accordingly, Applicants believe that claims 4-6 are in a condition for allowance.

Allowable Subject Matter

Applicants gratefully acknowledge that the Examiner has indicated the claims 9-13 are allowed.

Conclusion

In view of the above amendments and remarks, it is respectfully submitted that the present form of the claims are patentably distinguishable over the art of record and that this application is now in condition for allowance. Such action is requested.

Respectfully submitted,

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